

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/38648

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(7) : G01N 33/53; C12Q 1/68; G06F 19/00 US CL : 435/6, 7.1, 7.2, 7.21; 702/19, 20 According to International Patent Classification (IPC) or to both national classification and IPC											
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) U.S. : 435/6, 7.1, 7.2, 7.21; 702/19, 20 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST search terms: sepsis, marker, biomarker, statistic, doom, doomed											
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b> <table border="1"> <thead> <tr> <th>Category *</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X, P — A, P</td> <td>US 2004/0157242 A1 (IVEY et al) 12 August 2004 (12.08.2004), see entire document.</td> <td>1-5, 9, 11-16 — 6-8, 10</td> </tr> <tr> <td>X, P — A, P</td> <td>US 2004/0121350 A1 (ANDERBERG et al) 24 June 2004 (24.06.2004), see entire document.</td> <td>1-5, 9, 11-16 — 6-8, 10</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X, P — A, P	US 2004/0157242 A1 (IVEY et al) 12 August 2004 (12.08.2004), see entire document.	1-5, 9, 11-16 — 6-8, 10	X, P — A, P	US 2004/0121350 A1 (ANDERBERG et al) 24 June 2004 (24.06.2004), see entire document.	1-5, 9, 11-16 — 6-8, 10
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<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.											
<table border="0"> <tr> <td>           * Special categories of cited documents:            "A" document defining the general state of the art which is not considered to be of particular relevance            "E" earlier application or patent published on or after the international filing date            "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)            "O" document referring to an oral disclosure, use, exhibition or other means            "P" document published prior to the international filing date but later than the priority date claimed         </td> <td>           "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention            "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone            "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art            "&amp;" document member of the same patent family         </td> </tr> </table>			* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family							
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Date of the actual completion of the international search 05 August 2005 (05.08.2005)		Date of mailing of the international search report <b>23 AUG 2005</b>									
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer <i>Marianne P. Allen</i> Marianne P. Allen Telephone No. 703-308-0196									

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## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:  
Please See Continuation Sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
  2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-16
- Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

**BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING**

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-16, drawn to a method for selecting a panel of biomarkers useful for determining the stage of sepsis.

Group II, claim(s) 17-21, drawn to a method for providing a survival prognosis for an animal diagnosed with sepsis.

Group III, claim(s) 22-26, drawn to a method of determining the stage of sepsis in an animal.

Group IV, claim(s) 27-31, drawn to a method of evaluating a test compound for treating sepsis syndrome.

Group V, claim(s) 32, drawn to a method of determining a reference score for a group of animals.

Group VI, claim(s) 33-35, drawn to a method of determining a reference score for a group of sepsis patients.

Group VII, claim(s) 36, drawn to a model system for septic syndrome.

Group VIII, claim(s) 37-40, drawn to a method of testing the effectiveness of a compound against a sepsis target.

Group IX, claim(s) 41-42, drawn to a method for identifying biomarkers involved in the systemic inflammatory response to infection.

Group X, claim(s) 43-44, drawn to a method of treating sepsis.

The inventions listed as Groups I-X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical feature of the method of Group I is the particular method steps and goal set forth therein. These steps and this goal are not shared by the method of any other group. Each of these methods has different method steps and goals. The model of Group VII is not used by nor produced by the method of Group I and thus does not share the same special technical feature as Group I.